C8650-4

Volume 64, Number 7
July 1986

Electric Light & Power

THE NEWS MAGAZINE OF ELECTRIC UTILITY MANAGEMENT AND TECHNOLOGY

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NRC licenses Catawba-2

Duke Power's 1,145 MW Catawba Nuclear Station Unit 2 (r.) was issued a full power operating license by the Nuclear Regulatory Commission in May. The $3.7 billion two unit station is jointly owned by Duke Power, the North Carolina Municipal Power Agency No. 1, North Carolina Electric Membership Corp., Saluda River Membership Corp., and the Piedmont Municipal Agency. Construction began on the station in 1974, Catawba-1 generated its first electricity in January 1985. The plant is located in South Carolina on the shore of Lake Wylie about 17 miles southwest of Charlotte, North Carolina.

Summer peak demand will rise; capacity adequate, NERC says

PRINCETON, NJ—U.S. electric utilities predict a 4.9 percent increase in summer peak demand over last year, according to a report by the North American Electric Reliability Council (NERC).

In Canada, utilities are forecasting a 4.6 percent increase.

Only one NERC region, the Mid-Atlantic Area Council, is forecasting a decrease in 1986 summer peak demand (-1.0%). The Mid-continent Area Power Pool, which covers the North Central portion of the U.S., forecasts the highest increase in summer peak (11.0%).

NERC says that generating capacity margins will be adequate to meet the demands in all areas except Long Island. The report points out that the delay in the commercial operation of Long Island Lighting Company's Shoreham nuclear plant coupled with insufficient transmission capacity to Long Island could result in power supply problems this summer.

Another problem area pointed out by the report is in the Tennessee Valley, where TVA has five nuclear units out of service. NERC said continued drought and extremely hot weather in the valley could cause "critical operating conditions."

Regarding electricity transmission, NERC stated in its report, "The recent dramatic decrease in the price of oil has reduced the amount of economy energy being transferred over the bulk electric supply networks. These transfers are still high in some areas, which reduces the ability of utilities to respond to system disturbances."

NERC believes an oil price increase will likely increase energy transfers and load transmission networks to their maximum allowable levels more hours of the day.

"Delays in building additional transmission lines continue to restrict electric energy transfers in North America and jeopardize system reliability," warned the report.

NERC reports that transmission restrictions still exist in Montana, Colorado, Ontario, Michigan and the Wisconsin-Minnesota area.

A delay in the construction of the Belle River-Jewel No. 2 345-kV line in Michigan leaves the system open to instability, low voltage in Michigan and Ontario and possible intersystem cascading outages, found NERC.

Also, NERC said the Rocky Mountain Power Area is plagued with transmission limitations that severely limit surplus energy deliveries to the Southwest to displace oil and gas-fired generation.

"Parallel path flows (loop flows) may also cause curtailments of economy, surplus and even firm energy schedules from Colorado, New Mexico and Arizona to Southern California and from the Pacific Northwest to California.

Two coal-fired plants and one nuclear unit are expected to come online this summer. NERC said Basin Electric Power's Antelope Valley-2 (450 MW) unit and Intermountain Power Agency's Intermountain-1 (761 MW) should begin service this summer. Also, Gulf States Utilities' River Bend-1 (940 MW) nuclear unit will begin operating.

For more information on NERC's *1986 Summer Assessment*, call the council at (609) 924-6050.

Look for 1985's Top 100 Operating Performance story in the August EL&P

Senate's tax reform measure gains support of EEI Board

SAN FRANCISCO—The Edison Electric Institute's Board of Directors voted at its annual meeting last month to support passage of the Senate Finance Committee's tax reform bill.

The board said that it is important for the Senate to pass the committee bill in order for meaningful tax reform legislation to be enacted in 1986.

EEI said it was concerned with provisions of the bill affecting long-range capital formation needs. The board agreed that, despite cash flow difficulties it will pose for many utilities, the industry should support Senate passage of the bill.

The board also agreed to join the "15/27/33" coalition, which is committed to oppose any amendments that increase the top tax rates, add any new taxes, or in any way diminishes tax relief provided to low income individuals and families.

Will seek changes

When the bill gets to joint committee, the board indicated it will seek further improvements, especially in the proposed alternative minimum tax provisions.

The congressional Joint Committee on Taxation noted in a summary of the bill that it "...is estimated to be revenue neutral; over the next five years, the tax burden of individuals would be reduced by approximately $100 billion, while corporate taxes would increase by a similar amount."

According to the summary, the top corporate income tax rate would be cut from 46 to 33 percent. The investment tax credit would be repealed, but the present-law Accelerated Cost Recovery System would generally be enhanced for equipment to provide more generous depreciation benefits.

Also, the alternative minimum tax for corporations would be instituted, which the bill's creators say will prevent profitable corporations from avoiding any significant current tax liability.

Bill provisions

Among some of the Senate bill's provisions:

- Utility property with an ADR midpoint life of 20 years or more; and steam and electric generators or distribution systems would be depreciated over 15 years using a 150 percent declining balance.
- The investment tax credit would be repealed effective January 1, 1986. Credit carryforwards and credits earned on transition property would be reduced by 30 percent.
- Finance lease rules would be repealed, effective January 1, 1987.
- Utilities using the accrual method of accounting would have to include earned but unbilled income in gross income.
- The 85 percent limitation on the amount of income tax liability that can be offset by business tax credits would be reduced to 75 percent.
- Business energy tax credits would be extended for solar, geothermal and ocean thermal energy through 1988, and for wind energy and biomass through 1987, at reduced rates. The residential energy credits would expire (after 1985) as under present

Continued on page 26

Utility productivity declined in last 13 years, reports NARUC

WASHINGTON—Only one of 112 electric utilities experienced a positive improvement in productivity between 1972 and 1984, according to a new report from the National Association of Regulatory Utility Commissioners (NARUC).

Using a technique known as Total Factor Productivity (TFP), NARUC said Central Power & Light Company demonstrated the highest productivity improvement over the thirteen years. Ranked from second to fifth were West Texas Utilities Co., Union Electric Co., Southwestern Electric Power Co. and Long Island Lighting Company.

NARUC's *Electric Utility Performance Study* has been updated and now includes 1984 data. The report compares financial performance, electricity price trends and operating performance of 112 major investor-owned electric utilities.

The association began publishing the studies in 1984 to develop a means by which regulators and others could compare the performance of electric companies over time.

NARUC Director of Financial Analysis Mike Foley told *EL&P* that the most important finding of the newest study is that "technological changes in the industry have not kept pace with the cost increases companies have had to absorb and pass on to customers."

More expensive

He said the report clearly shows that the economies of generating electricity substantially changed in the early 1970s, making it more and more

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News Briefs

JILL MINNER, Editorial Assistant

Solarex installs photovoltaics for PECo

● Solarex Corp. said it will install a 3.6 kW array of amorphous photovoltaic modules this summer at Philadelphia Electric Company's (PECo) Limerick-Pottstown Airport. PECo is undertaking the research and development project to gain experience with the equipment. "Utilities participating in this type of research effort, will be in a position to provide valuable service to customers as this technology becomes economically viable," said John Goldsmith, vice president of technology programs at Solarex. The amorphous solar cells, according to Solarex, will provide a substantial cost reduction over the crystalline solar cells currently being used.

ANPP offers $25,000 reward for line sabotage information

● The Arizona Nuclear Power Project (ANPP) is offering a $25,000 reward for information leading to the arrest and conviction of the person or persons responsible for the May 14 sabotage of three major high-voltage lines. The lines are tied to the Palo Verde nuclear generating station, 55 miles west of Phoenix. The FBI has determined that several individuals caused three of the four 500,000-volt lines to trip. Within a 25-minute period, beginning at approximately 9 p.m., the three lines experienced separate faults at points 25 to 35 miles from the plant, according to ANPP. Any information concerning the incident should be reported to the FBI at (602) 279-5511.

NY hydropower plant named after Challenger Astronaut Jarvis

A New York Power Authority hydropower plant in the Mohawk Valley, has been named after Astronaut Gregory B. Jarvis (right) who died aboard the Challenger space shuttle in January. "Gregory Jarvis dedicated his life to science and excellence," said Power Authority Chairman Richard M. Flynn, "His accomplishments are an inspiration to the citizens of the Mohawk Valley and the entire state and nation. The Power Authority is proud to help honor his memory." Jarvis graduated with degrees in electrical engineering from the State University of New York at Buffalo in 1967 and from Northeastern University in Boston in 1969. The 9,000-kW, $23 million plant is in the final stages of testing, according to the New York Power Authority, and is eventually expected to produce more than 32 million-kWh of electricity annually.

Minnesota Power splits common stock two-for-one

● Minnesota Power said a two-for-one split of its common stock went into effect June 20. At the company's annual meeting in May, shareholders approved an increase in the authorized number of common shares from 25 million to 65 million. "We believe a two-for-one split will make our stock more appealing to investors across-the-board," stated Minnesota Power Chairman Jack F. Rowe.

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EL&P readers whose responsibilities include both Generation and Transmission/Distribution receive both technology sections. Other readers receive the technology section that applies to their respective area of responsibility. The Generation edition is indicated by a single dot (•) in the upper right corner of page 1; the T/D edition carries two dots (••). All readers receive EL&P's industry news section.

EIA, NEMA launch Power Sources Industry Council

● The Electronic Industries Association (EIA) and the National Electrical Manufacturers Association (NEMA) have jointly launched the Power Sources Industry Council. The council will be divided into functional areas such as marketing, education, information, user liaison and government relations. Its goals and objectives include providing a national voice in government and industry affairs for companies manufacturing components and devices covered by the council's scope; promotion of the exchange of ideas and information between member firms; development and distribution marketing, business information and the establishment of a mechanism by which standards can be developed. The product scope of the council includes linear, switching, AC/DC, DC/AC and DC/DC power supplies, miniature and modular power supplies, power line conditioners, power line filters, batteries, battery chargers and solar cells, UPS/uninterruptible power supplies, test equipment for power supplies and fuses. The council will be operated by an elected board of directors consisting of six members each from EIA and NEMA.

Washington Public Power approves litigation settlements

● Washington Public Power Supply System's executive board approved a total of $18,391,837 in litigation settlements with three major electrical contractors, Fischbach & Moore Inc., Wismer & Becker Contracting Engineers Inc. and Lord Electric Co. Settlements totaling $22,403,592 have now been reached with five of six electrical contractors named in an August 1983 lawsuit filed in Seattle's U.S. District Court. The suit alleges the defendants had engaged in a national conspiracy to rig competitive bids on electrical contracts, including those for Supply System construction projects. Settlements were reached last year with Commonwealth Electric Co. and in February with Howard P. Foley Co. Litigation continues against L.K. Comstock & Co.

Consumers Power investigates equipment failures

● Consumers Power Co. is investigating equipment failures associated with the May 19 unplanned automatic shutdown of its 761 MW Palisades nuclear plant. The shutdown occured when electrical power to the hydraulic control valves for the unit's turbine-generator was lost. After the Nuclear Regulatory Commission (NRC) expressed its concern about the link between the unplanned shutdown and the equipment failures, Consumers Power agreed to a recommendation by NRC officials that the plant be temporarily kept out of service pending an investigation and resolution. The company will conduct its own investigation of the unit's condition to ensure continued safe and reliable operation, according to Jack Reynolds, Consumers Power executive vice president for energy supply.

KCP&L plans central steam heating system conversion

● Kansas City Power & Light Co. (KCP&L) submitted a plan to the Missouri Public Service Commission for converting the utility's central steam heating system to on-site electric steam boilers or other electric heating equipment. KCP&L officials said the system, which has served commercial buildings in the downtown district since before 1900, now operates at a substantial loss because of rising costs, inadequate rates and a declining number of customers. According to KCP&L's plan, the system will be phased out by 1990 and the company will handle all equipment and installation expenses.

NLC opposes sale of federal power marketing administrations

● A committee of the National League of Cities (NLC) has adopted a resolution opposing the Reagan Administration's proposal to sell the five federal power marketing administrations (PMAs). According to the resolution, the sale of the federal water resources to private interests would "jeopardize the economic vitality of certain cities, states and regions of the country by forcing up electric costs for consumers." The American Public Power Association estimates that the sale of the PMAs would result in rate increases of up to 390 percent. The NLC board of directors will consider the resolution when it meets this month.

NARUC releases report on EEI's 1985 expenditures

● The National Association of Regulatory Utility Commissioners (NARUC) released its 1985 *Report of the Committee on EEI Oversight*. This second annual report on the Edison Electric Institute's 1985 financial operations differs from last year's report in two respects. The 1985 report covers a twelve-month period as opposed to last year's three-month trial period coverage. Also, this year's report includes a schedule of all honoraria and expense reimbursements paid to government officials by EEI. An independent auditor's report of financial statements and supplementary information is contained in the report, as well as an organizational chart, IRS Form 990, a list of the major Federal and State legislation on which EEI personnel spent time researching, and the EEI definition of accounts used for NARUC reporting requirements. Copies of NARUC's report are available for $20.00 from NARUC, P.O. Box 684, Washington, D.C. 20044.

GPU companies to spend $40 million to protect environment

● General Public Utilities Corp. (GPU) said that three of its operating companies have allocated almost $40 million this year on projects to protect the environment. Pennsylvania Electric Co. will invest $22 million, Metropolitan Edison is expected to spend almost $10 million and Jersey Central Power & Light has allocated more than $7.5 million on environmental facilities, according to GPU. "We recognize our responsibility to minimize the impact of our operations on the environment," stated GPU President Herman Dieckamp.

Editorial

Chernobyl: The big problem...

The future of nuclear power in the U.S. was dimmed again by the dark cloud (no pun intended) of Chernobyl. Thanks to the national news media...primarily television, the American public was re-educated in the Russian-roulette nature of nuclear power. Despite having been shown to have created a near national panic by its imaginative reportage of the Three Mile Island excursion in 1979, network TV *again* exercised its creative capabilities to build the Russian accident into a near-Armageddon, aided and abetted by local station efforts to grab some of the spotlight. Combined they proved once again that in the TV news business, as in other parts of show-biz, nothing (like facts or the lack thereof) should ever be allowed to detract from the desired impact on the audience.

Russian restrictions of information about the accident merely made it easier for TV news directors to treat the event creatively...leading to a variety of interpretations of what might have happened there, often followed by anti-nuclear descriptions of how complex nuclear technology is and why we in the U.S. are destined to suffer even more disastrous nuclear catastrophes in the future.

The frequency with which the general news media look for explanations or clarifications of technical issues to the self-styled "experts" from organizations like Ralph Nader's Critical Mass organization or the Union of Concerned Scientists is a source of constant wonder. Of course, since these "experts" are not limited by fact, their presentations can be as dramatic as they desire and that makes for a strong show-business finish, a real zapper, in strong contrast to most pro-utility presentations. Moreover, the anti-nuclear front seems to make its people available whenever and wherever it can, while pro-nuclear forces seem to hang back, waiting for invitations.

If executives of nuclear utilities want to assess how well they've done their community and media relations jobs, TV coverage of the Chernobyl excursion should provide a score card. The mass of misinformation and scaremongering that followed in the days immediately following the report of the accident should make it clear that the industry hasn't done a very good job of educating the media or convincing them of the industry's credibility and sincerity.

... and the small one: PURPA

It's heartening to note the interest of Congress in re-evaluating PURPA and its effect on energy suppliers and users. PURPA, through its cogeneration clauses, has provided slick entreprenuers with licenses to steal in many areas. While the immediate victim may appear to have been the local utility, the ultimate victim is the one who always must pay the bill...the consumer.

Both the House and Senate are reviewing PURPA legislation, questioning whether the forced purchase by a utility of electricity from a cogenerator is always good for the consumer. Among other issues, they are evaluating whether or not cogenerators may not have become unregulated utilities, given the opportunity to earn an unregulated return on the guaranteed sale of energy at an officially directed rate.

While there are a number of well-engineered, integrated heat/electricity systems in industry throughout the U.S., there also are many cogenerators in the game only to make a quick buck, who only nod at the concept of service.

The fundamental purposes of PURPA unfortunately have gotten lost in the rush to guarantee cogenerators their 'rights.' Hopefully, Congress will see these weaknesses and correct them.

Corrections to June Top 100 Electric Utilities report

The following is published to correct errors made in 1984 data input for the Top 100 Electric Utilities report, published in the June issue of *EL&P*:

Cincinnati Gas & Electric's 1984 per share earnings should have been recorded as $2.45, not $1.45 as listed in the earnings growth table (p. 17). This would reduce its 1985 growth to 34.7 percent, which would have moved it down one position, to 4th, behind Utah Power & Light.

On the Sales Data table (p.18), Potomac Electric Power achieved a 4.2 percent increase in kWh sales in 1985, good for 24th ranking among the Top 100 electric utilities, not 2nd as initially calculated. As a result, companies originally ranked 3 through 13 all move up one rank. Kansas Power & Light now should be ranked 13th now on the strength of its 7.1 percent gain in kWh sales in 1985. Companies ranked 24 through 99 on the published table now should all move down one rank.

Letters

Need for nuclear education

You are quite right in describing our national indulgence in the nuclear debate as a luxury brought us by our abundance of natural resources, and in stressing that our utilities must support nuclear suppliers *now* if we expect to have a nuclear industry in our future. (See March Editorial, p.4) I would like to add a note about another crucial element in the equation that also needs immediate support.

I quote from "The Revitalization of Nuclear Energy Education in the United States," a study completed in October 1985 by the Nuclear Engineering Department Heads Organization: "The current decline of nuclear energy education in the United States threatens the ability of the country to supply nuclear energy professionals. Without such professionals, the nuclear industry will eventually find it impractical or impossible to maintain the option of using nuclear energy for power generation."

The report documents a number of disturbing trends: declining numbers of degrees in nuclear engineering, reduced federal funding of university reseach and fellowships, obsolete laboratory equipment and research reactor facilities. Nuclear professionals will be needed in this country not only to maintain the nation's existing fleet of nuclear power plants throughout their lifetimes, but also to implement the changes that will be necessary to revive the nuclear option in this country—design standardization, efficiency improvements and rational approaches to licensing and regulation.

Like the industrial infrastructure you discussed, the nation's nuclear energy education program did not just happen. It took over 30 years of building and refining to make it the world's best. If we allow it to erode through the lack of interest, we may not have available the most important resource needed to retain the nuclear power option, which is fast becoming the option of choice for industrialized nations around the world.

Gerald J.Brown, Professor
University of Lowell, Lowell, MA

EEI's Edison Medal goes to Florida Power & Light Co.

SAN FRANCISCO—The Edison Electric Insitute has presented its highest award, the Edison Medal, to Florida Power & Light Co.

The award honors the utility for its Quality Improvement Program, an internationally recognized program that has led to "significant savings, marked increases in customer satisfaction, reduction in production and delivery costs and improved communication and cooperation among employees."

Employee participation

Instrumental to the program's success has been a high level of employee participation. FP&L quality teams have submitted more than 1700 suggestions to improve the quality of service to customers since the program began in 1982.

In addition, more than 400 organizations in the U.S. and Europe, including 24 electric utilities, have attended special seminars about the program and how to implement similar efforts.

Recognition of committment

John J. Hudiburg, FP&L chairman of the board, said the award "means more to us than any other we have ever received because it is recognition of our committment to customer service by our own industry." Declaring that winning is often a matter of teamwork, and that more than 8,000 of the company's employees are actively involved on quality teams, he said "nowhere can the cooperative spirit of service be more evident."

The Edison Medal is presented annually at EEI's convention in recognition of conscientious service and progressive development by investor-owned electric utilities.

FP&L Chairman John J. Hudiburg (l) receives the prestigious Edison Award from Sherwood H. Smith, president of the Edison Electric Institute, at EEI's 54th Annual Convention in San Francisco last month. The award, EEI's highest recognition, was presented to FP&L for its internationally recognized quality improvement program.

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Barrington, IL 60010 • (312) 381-1840

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